

Site Name: **MATTHIESSEN AND HEGELER ZINC COMPANY**EPA ID: **IL0000064782**NPL Status: **Currently on the Final NPL**Region: **05**Section: **SFD/RRB#1/RRS3:****090594401**Primary RPM: **COLLIER, DEMAREE**GM Survey Status: **Contaminated Ground Water Migration Under Control**Estimated Date for Sufficient Data **9/30/2025**Estimated Under Control Date: **09/14/2012**Justification Type: **GMID-GMUC**Justification Date: **9/14/2012**GM Last Review Date: **09/14/2012**RPM Certified: **Yes**

Justification Text: If site status has changed. Please enter a justification as to why the status has changed:

The Matthiessen and Hegeler Zinc Company Site was considered "Insufficient Data to Determine Contaminated Groundwater Migration Under Control Status" because all data collection activities had not been completed and EPA had not yet fully assessed all groundwater migration pathways. (See Comment field for additional information)

Definition: Is the migration of contaminated ground water being controlled through engineered or natural processes?

Q. Does the site currently have contaminated groundwater or did site conditions warrant EPA's investigation or remediation of groundwater contamination in the past?

Answer: **Yes**

No

STOP. You do not  
need to complete  
the GM EI

Yes

Step 1. Based on the most current data on the site, has all available / relevant / significant information on known and reasonably suspected releases to groundwater been considered in this determination?

Answer: **Yes**SDMS/Control Number: **372416**

List Reference Document(s):

**Draft 2012 RI Report**Insufficient  
Data / No

Yes

Step 2. Is groundwater known or reasonably suspected to be contaminated above appropriately protective risk-based levels (applicable promulgated standards, as well as other appropriate standards, guidance, or criteria) anywhere at or from the site?

Answer: **Yes**

SDMS/Control Number:

List Reference Document(s):

**Draft 2012 RI Report**Insufficient  
Data

No

Contaminated  
Groundwater  
Migration Under  
Control

Yes

Step 3. Is the migration of contaminated groundwater stabilized (such that contaminated groundwater is expected to remain within "the existing area of contaminated groundwater") as defined by the monitoring locations designated at the time of this determination?

Answer: **Yes**

SDMS/Control Number:

List Reference Document(s):

**Draft 2012 RI Report**Insufficient  
Data

No

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Yes

US EPA RECORDS CENTER REGION 5



456292

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Insufficient  
Data

Step 4. Does "contaminated" groundwater discharge into surface water bodies? If yes, please proceed to Step 5. If no, please scroll down to Step 6.

Answer: **Yes**

SDMS/Control Number:

List Reference Document(s):

**Draft 2012 RI Report**

No

Yes

Insufficient  
Data

Step 5. Can the discharge of "contaminated" groundwater into the surface water be shown to be "currently acceptable" (i.e., not cause unacceptable impacts to surface water, sediments, or ecosystems that should not be allowed to continue until a final remedy can be made and implemented)?

Answer: **Yes**

SDMS/Control Number: **Draft 2012 RI Report**

List Reference Document(s):

No

Yes

Insufficient  
Data

Step 6. Will groundwater monitoring / measurement data (and surface water / sediment / ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater"?

Answer: **Yes**

SDMS/Control Number:

List Reference Document(s):

**Draft 2012 RI Report; GW monitoring would be component of remedy in future ROD.**

No

Yes

Insufficient Data to Determine  
Contaminated Groundwater  
Migration Under Control Status

Contaminated Groundwater  
Migration Under Control

Contaminated Groundwater  
Migration Not Under Control

#### Approvals (Initial and Date)

RPM	Section Chief	Technical Review	Branch Chief	IMC	Data Entry

Site Name: **MATTHIESSEN AND HEGELER ZINC COMPANY**EPA ID: **IL0000064782**NPL Status: **Currently on the Final NPL**Region: **05**Section: **SFD/RRB#1/RRS3: 090594401**Primary RPM: **COLLIER, DEMAREE**HE Survey Status: **Current Human Exposure Not Controlled**

Estimated Date for Sufficient Data

HE Estimated Control Date: **3/31/2011**LTHHP Estimated Control Date: **9/30/2025**Justification Type: **HEID-HENC**Justification Date: **03/16/2011**HE Last Review Date: **9/14/2012**RPM Certified: **Yes**

Justification Text: If site status has changed, please enter a justification as to why the status has changed:

**Unknown -Early stage of RI.**

Definition: The Long-Term Human Health Protection EI documents the progress achieved towards providing long-term human health protection by measuring the incremental progress achieved in controlling unacceptable human exposures at a site.

Step 1: Is there sufficient known and reliable information to make an evaluation on human exposure at this site?

Answer: **Yes**SDMS Number(s): **372416**List Reference Document(s): **Draft RI Report, Draft Risk assessment Report**

No

Insufficient Data  
to Determine  
Human Exposure  
Control Status

Yes

Step 2: Have all long-term human exposure-related cleanup goals been met for the entire site?

Answer: **No**

SDMS Number(s):

List Reference Document(s): **Draft RI Report, Draft Risk assessment Report**

Yes

Long-Term  
Human Health  
Protection  
Achieved

No

Step 3: Are there complete human exposure pathways between contaminated groundwater, soil surface water, sediment, or air media and human receptors such that exposures can be reasonably expected under current conditions?

Answer: **Yes**

SDMS Number(s):

List Reference Document(s): **Draft RI Report, Draft Risk assessment Report**

No

Yes

Step 4: Are the actual or reasonably expected human exposures associated with the complete pathways identified in Step 3 within acceptable limits under current conditions?

Answer: **No**

SDMS Number(s):

List Reference Document(s):

No

Current Human  
Exposures Not  
Controlled

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Yes

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Step 5: Is the site Construction Complete, is the remedy operating as intended, and are engineering and institutional controls (if required), in place and effective?

Answer:

SDMS Number(s):

List Reference Document(s):

No

Current Human  
Exposures  
Controlled

Yes

Current Human  
Exposure  
Controlled and  
Protective  
Remedy in Place

Step 6: Are there continuing exposures at the site? Answer Yes only if EPA (or a state or PRP) has exhausted all response actions and legal authorities to prevent unacceptable human exposure, yet exposures continue due to a refusal by the property owner(s) to participate in the remedy (e.g., refusal to accept a municipal water supply hookup) AND the region wishes to exercise its discretion to classify this site as Human Exposure Under Control, consistent with the requirements laid out in the Superfund Environmental Indicators Guidance (OSWER 9285.02, March 2008, pages 4-10 and 4-11).

Answer:

### Exposure Pathway Description

If Human Exposure is NOT under control, please describe the exposure pathway.

☐ Approved by Headquarters Environmental Coordinator

Unofficial

The Matthiessen and Hegeler Zinc Company Site is considered "Current Human Exposures Not Controlled." The Site was historically used primarily for mining and smelting activities and is currently inactive, except on the portion of the Site operated by Carus Chemical Company which has never been involved in any of the smelting activities. The Site is entirely fenced except along the Little Vermillion River, however it is evident that trespassers enter the Site. A remedial investigation was initiated in 2007 and the sampling and risk assessments are expected to be finalized in summer 2012. The data and risk assessments show that there are unacceptable risks associated with the Site, particularly for the commercial/industrial on-site worker scenario and for trespassers. On-site soil risks are driven by potential exposure to metals (primarily arsenic, cadmium, manganese and zinc), benzo(a)pyrene and other carcinogenic PAHs, asbestos and PCBs.

Official

The Matthiessen and Hegeler Zinc Company Site is considered "Current Human Exposures Not Controlled". The Site was historically used primarily for mining and smelting activities and is currently inactive, except on the portion of the Site operated by Carus Chemical Company which has never been involved in any of the smelting activities. It is entirely fenced except along the Little Vermillion River, however it is evident that trespassers enter the Site. A remedial investigation was initiated in 2007 and the sampling and risk assessments have been drafted, but not yet finalized. The data and risk assessments show that there are unacceptable risks associated with the Site, particularly for the commercial/industrial on-site worker scenario and for trespassers. On-Site soil risks are driven by potential exposure to metals (primarily arsenic, cadmium, manganese and zinc), benzo(a)pyrene and other carcinogenic PAHs, asbestos and PCBs.

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